

REMARKS/ARGUMENTS

Claims 1-13 are pending herein. Claims 1, 3 and 13 have been amended as supported by page 16, line 12--page 17, line 2 of the specification, for example. Applicants respectfully submit that no new matter has been added.

1. Claims 1-13 were rejected under §112, first paragraph, in section 3 beginning on page 2 of the Office Action. To the extent that this rejection may be applied against the amended claims, it is respectfully traversed.

Independent claims 1, 3 and 13 each recite, among other things, that a plurality of spots of capture material are arranged on a base plate by supplying, onto the base plate by means of an ink-jet system, a plurality of types of capture solutions. Claims 1, 3 and 13 have been amended to clarify that the capture solutions comprise the capture material dissolved in an aqueous solution.

The Examiner contends that while the specification is enabling for ink-jet deposition of nucleic acids (DNA), the specification does not reasonably provide enablement for “capture material.” Even though Applicants do not agree with the Examiner’s position, the independent claims have been amended in an effort to expedite the prosecution of the present application. As noted above, each of the independent claims has been amended to specifically recite that the capture solutions deposited by the ink-jet system comprise the capture material dissolved in an aqueous solution. Through the discussion provided below along with the evidence provided in the attached Rule 132 Declaration, Applicants respectfully submit that it should be clear to the Examiner that the specification is enabling for ink-jet deposition of capture materials dissolved in an aqueous solution.

The Examiner is respectfully requested to enter and consider the attached Rule 132 Declaration of Mr. Tadahiko Inukai who is an expert in the field of ink-jet printing. Mr. Inukai has reviewed the prosecution history of this application, including the Office Action mailed July 17, 2007, and has concluded that, even though the specification provides the specific example of a capture solution comprising DNA

dissolved in an aqueous solution, the specification is enabling for all types of capture materials dissolved in aqueous solutions (Declaration paragraph 4).

Mr. Inukai explains that the performance and reliability of the ink-jet device used in the present invention will be operationally affected by the fluid characteristics of the capture solution to be dispensed (Declaration paragraph 5). Specifically, the droplet size is determined directly by the capture solution's surface tension, and the reliability of the droplet formation is determined by the capture solution's viscosity (Declaration paragraph 5). Each of these characteristics are primarily influenced by the buffer solution (i.e., the aqueous solution) used as the carrier for the dissolved capture material (Declaration paragraph 6). Mr. Inukai confirmed that one skilled in the art would clearly understand the process of making rudimentary alterations to the buffer solutions and capture materials in order to create a capture solution that results in the proper functioning of the ink-jet device (Declaration paragraph 6).

Mr. Inukai also confirmed that the specification provides more than ample guidance on pages 16 and 17 for one skilled in the art to prepare capture solutions having capture materials (e.g., powdered DNA, powdered antigen, powdered reagent, powdered cells, enzymes, etc.) dissolved into an aqueous solution (Declaration paragraph 7). Mr. Inukai also confirmed that while the present specification provides only a single specific example of an actual capture material (DNA), it clearly enables one skilled in the art to use the invention in connection with other capture materials, provided they are dissolved in an aqueous solution (Declaration paragraph 8).

Applicants respectfully submit that the attached Declaration submitted under 37 CFR 1.132 provides specific evidence for the Examiner to conclude that the specification is enabling for ink-jet deposition of capture material dissolved in an aqueous solution, as currently recited in amended claims 1, 3 and 13. Applicants respectfully submit that the PTO's position is based solely on the Examiner's arguments and is based on a broader definition of capture solutions, the latter of which has been narrowed in all of the pending independent claims. The attached Declaration should be considered by the Examiner to be evidence, which cannot be dismissed

through mere arguments alone. In light of the foregoing, reconsideration and withdrawal of the present rejection are respectfully requested.

2. Claims 1-13 were rejected under the judicially created doctrine of obviousness-type double patenting over claims 1-13 of U.S. Patent No. 6,753,144. Applicants respectfully request that the present rejection be held in abeyance until all of the prior art-based rejections have been withdrawn.

If the Examiner believes that contact with Applicants' attorney would be advantageous toward the disposition of this case, the Examiner is herein requested to call Applicants' attorney at the phone number noted below.

The Commissioner is hereby authorized to charge any additional fees associated with this communication or credit any overpayment to Deposit Account No. 50-1446.

Respectfully submitted,

November 14, 2007

Date



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SPB/TE/tlp

Attachment:
Rule 132 Declaration

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